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Balance-of-Payments Concepts and Measurement

Our concern in the present chapter is the arrangement and interpretation of balance-of-payments information for purposes of economic analysis and policy assessment. Balance-of-payments accounting is illustrated briefly in the appendix to this chapter. Those interested in greater detail, especially on matters related to accounting, are advised to consult specialized sources.[1]

Balance-of-Payments Concepts

It is appropriate to begin by a definition: *the balance of payments is a summary statement of all economic transactions between the residents of one country and the rest of the world, covering some given period of time.*

Like many definitions, this one requires clarification, especially with respect to the coverage and valuation of economic transactions and the criteria for determining residency. The coverage of economic transactions refers to both commercial trade dealings and noncommercial transfers, which may or may not be effected through the foreign exchange markets and which may not be satisfactorily recorded because of inadequacies in the system of data collection. Particularly difficult questions of valuation are posed by noncommercial transactions and by transactions that take place between domestic and foreign-based units of individual corporations. The determination of residency should ordinarily not be difficult, but even here questions may arise concerning the treatment of overseas military forces and embassies, corporate subsidiaries, and international organizations.[2]

1. See, for example, International Monetary Fund (1961) and Powelson (1955, Chaps. 21–22).

2. For some illustrations and further discussion of these matters of coverage, valuation, and residency with respect to the United States balance-of-payments accounts, see the Bernstein Report, Review Committee for Balance of Payments Statistics (1965, pp. 23–97) and Cooper (1966, pp. 380–83).

Transactions are recorded in principle on a double-entry bookkeeping is. Each transaction entered in the accounts as a credit must have a responding debit and vice versa. The distributions commonly made in ssifying the various accounts can be seen from the schematic balance of ments represented in Table 1.1 and from the illustrative transactions orded in the appendix to this chapter. There are many possible inter-tionships among the various items shown in Table 1.1 that arise from the plexities of the market and nonmarket transactions typically recorded an individual nation. Thus, the receipts and payments arising from chandise and service exports and imports shown in the current account y have their counterpart debits or credits recorded in one or more of the aining accounts.[3] The balance of payments must accordingly be looked s a whole rather than in terms of its individual parts.

t follows from double-entry bookkeeping that the balance of payments st always balance; total debits equal total credits. When we speak therefore positive or negative balance or a surplus or deficit, we evidently have in d some particular group or classification of accounts. For example, a itive balance of trade refers to an excess of merchandise exports over chandise imports (item 1) and vice versa for a negative balance of trade. ilarly, a current-account surplus or deficit refers to the difference between ipts and payments coming from exports and imports of merchandise and ices (items 1–5). As such, it represents the net contribution of foreign le to national income and expenditure. The balances on current account on unilateral transfers are frequently added together.[4] This balance of s 1–7 constitutes a measure of net foreign investment.[5]

he nation's long-term foreign investments, which are assumed to have a urity in excess of one year, are recorded in item 8. These consist generally direct investment in tangible physical assets of business firms and of tfolio investment in securities of various kinds. Item 8 may also include ate short-term capital movements with maturity of less than one year, ch represents changes in foreign- or domestic-currency working balances nded to facilitate the financing of regular commercial transactions or to advantage of international differences in interest rates. There is some troversy, however, as to whether private short-term capital movements uld be recorded in whole or in part in item 9 rather than in item 8. The ument for recording these movements in item 9 is that they may in large be transitory in nature, and further, that they cannot be distinguished

For some examples, see illustrative transactions (1)–(8) in the appendix to this ter.

As noted below, the balance on current account and unilateral transfers is labeled e "balance on current account" in the official U.S. balance-of-payments tables.

Note further, as in illustrative transaction (15) in the appendix to this chapter, that eceipt of the allocation of Special Drawing Rights can be considered as a unilateral sfer and will thus be included as a part of net foreign investment. See also footnote elow.

readily from official short-term capital transactions. We shall discuss these matters more fully later in this chapter. Assume for now that all the private short-term capital transactions are recorded in item 8.

This means that items 9 and 10 in Table 1.1 represent the "balancing" or "settlement" items in the balance of payments. These items are applicable in a system in which exchange rates are fixed by virtue of the nation's monetary authority standing ready to buy and sell foreign exchange in order to keep the exchange rate at some given level or within a specified range. These official transactions may take the form of increases or decreases in short-term capital assets or liabilities or an inflow or outflow of gold or other international monetary reserves. The size of the balancing items can be interpreted consequently as a measure of the foreign exchange authority's transactions undertaken to maintain exchange-rate stability. This suggests that if we wish in this context to speak of the balance of payments being in "equilibrium," the sum of the balancing items should be equal to zero. There should, in other words, be no net movement of official short-term capital and of gold and other international reserves. This will be the case when the total debits and credits in items 1–8, commonly referred to as the items "above the line," are equal. If the total debits and credits above the line are not equal, we can then speak of a positive or negative balance, or more commonly of a balance-of-payments surplus or deficit. This surplus or deficit will be reflected "below the line" with opposite sign in the balancing items 9 and 10.[6] Since the sum of these balancing items follows directly from the difference in totals of items 1–8, it should be clear that the cause of a surplus or deficit cannot be inferred directly from particular items above the line.

The transactions recorded in Table 1.1 are sometimes interpreted according to whether they are "autonomous" or "accommodating" in character. Transactions are considered autonomous insofar as they may be assumed to have been undertaken in response to commercial incentives or political considerations that are given independently of the state of the overall balance of payments or of particular accounts. Thus, items 1–8 in Table 1.1 might be treated as autonomous. Accommodating transactions arise accordingly out of the need to fill the gap between total autonomous debits and credits. The filling of the gap by a nation's foreign exchange authority, as recorded in items 9 and 10, can therefore be considered as accommodating in nature.

6. If we were to assume a flexible rather than a fixed exchange-rate system, there would not be any surplus or deficit in the balance of payments except perhaps in a transitional sense. That is, the excess of credits over debits or vice versa would cause the exchange rate to vary. This would bring about changes in items 1–8 until equality of receipts and payments was attained.

Note also that we have assumed all transactions to be correctly recorded. Since in actuality credits and debits may not be matched exactly because of reporting inadequacies, there will be a need for an "errors and omissions" item above the line. This item may be substantial especially in cases where short-term capital movements are imperfectly recorded.

TABLE 1.1
Schematic Balance of Payments

	Debits (−)	*Credits* (+)
Current account		
1. Merchandise	(−)	(+)
2. Transportation	(−)	(+)
3. Tourist expenditures	(−)	(+)
4. Investment income; fees and royalties; other services	(−)	(+)
5. Military and other government expenditures	(−)	(+)
Total, 1–5	(−)	(+)
Unilateral transfers		
6. Private remittances	(−)	(+)
7. Government transfers	(−)	(+)
Total, 1–7	(−)	(+)
Capital account [increase in assets or reduction in liabilities (−)]		
8. Foreign investment; direct and portfolio	(−)	(+)
Total, 1–8[a]	(−)	(+)
Balancing items [increase in assets or reduction in liabilities (−)]		
9. Short-term official capital movements		
10. Gold and other international reserve movements		
Total, 1–10	(−) equals	(+)

[a] The difference in totals (+) or (−) of items 1–8 "above the line" measures the balance-of-payments surplus or deficit which will be reflected in the balancing items recorded "below the line" in items 9 and 10.

Our discussion of the balance of payments has focused on the transactions recorded for some given period in the past and the resultant deficit or surplus. We have thus been considering an ex post conception of what has been called the "actual" balance-of-payments deficit or surplus.[7] It is also possible to conceive of the balance of payments in an ex ante sense of transactions that would be carried out in given market conditions. The criterion of balance-of-payments "equilibrium" in this ex ante sense is again no net movement of short-term capital and of gold and other international reserves, but the qualification must be added that this equilibrium be sustainable for the given market period. This corresponds to what Machlup (1950) has called the "market" balance of payments.[8]

7. This is the terminology used by Meade (1951, p. 15).
8. According to Machlup (1950; 1964, p. 70): "A dollar deficit in a country's market balance of payments may be tentatively defined as an excess of dollar amounts effectively demanded at the given exchange rate by would-be purchasers (who are not restricted by officially adopted or discretionary government control measures) over the dollar amounts

It is instructive to compare Machlup's market balance with another ex ante concept, the "true" or "potential" balance, which is identified with Nurkse (1945) and Meade (1951). Both Nurkse and Meade posited that equilibrium should be defined subject to two conditions: (1) given some reference point in the past, the authorities have not imposed additional trade or payments restrictions in order to reach equilibrium; and (2) equilibrium is not attained unless there is a simultaneous attainment of full employment without price inflation. What is noteworthy about these conditions, as Johnson (1951) and Machlup (1950) have emphasized, is that they result in a definition of equilibrium that depends on political value judgments concerning the use of restrictions and the desirable level of employment. Prohibiting the use of restrictions overlooks their possible welfare benefits under certain circumstances and creates a perhaps unwarranted bias in favor of general price adjustments as a means of restoring equilibrium. This latter "ideological" point applies also to the full-employment condition, which as Machlup (1950; 1964, p. 124) has noted, amounts to "infusing a political philosophy or programme into the concept of equilibrium."

This is not to say that value judgments have no place in economic analysis. The point is that these judgments should not be used in defining analytical concepts, but rather should furnish criteria in evaluating the workings of particular measures of economic policy. The Nurkse-Meade equilibrium concept might thus be more properly labelled as the "full-employment balance."[9] This would then make it a variant of what Machlup (1950; 1964, p. 78) has called the "programme balance," which reflects the desires of the authorities to achieve certain specified national goals such as full employment or some particular rate of economic growth.

The question of specifying balance-of-payments equilibrium subject to the aforementioned conditions is not merely terminological in nature. For once it is granted that the authorities will carry our various policies to achieve certain national goals,[10] it may no longer be possible to retain the aforementioned distinction between autonomous and accommodating transactions and therefore to talk unambiguously about a certain sized surplus or deficit in the balance of payments. There is a continuous interaction between transactions and changes in policies. Transactions may be undertaken as a consequence of particular changes in policy at home and abroad. And by the same token, changes in policy may be introduced in order to offset the effects of particular transactions that may contribute to balance-of-payments

9. Cf. Machlup (1950; 1964, p. 126). To be more realistic, we might conceive of alternative full-employment balances subject to given tradeoffs between price inflation and unemployment as embodied in a modified Phillips curve. See Smith (1970, pp. 366–68 and 381–83) for a treatment of the modified Phillips curve.
10. We shall have more to say about the use of domestic monetary and fiscal policies

disequilibrium. There is, in other words, a shifting of cause and effect that makes it difficult to distinguish autonomous from accommodating transactions, and vice versa. The consequence is that full-employment balance-of-payments equilibrium cannot be determined precisely in an ex ante sense.

There is no unambiguous way in an actual, ex post statement of the balance of payments for any given time period to separate the autonomous from the accommodating items. It is possible, of course, to arrange the balance-of-payments accounts in a variety of manners for purposes of analysis. But it should remain clear that insofar as any arrangement hinges on imputing specific motivations of an autonomous or accommodating nature to particular classes of transactions, it is bound to involve some degree of arbitrariness.

In most countries great importance has not been attached to different possible arrangements of the balance of payments. In the United States, however, and to a lesser extent in the United Kingdom, these matters have provoked extended discussion and controversy. This has been the case especially in view of the change in the U.S. balance-of-payments position after 1958 and the special role that the dollar plays in financing world trade and in serving as a reserve currency. We turn next, therefore, to the major issues involved in the various alternative measurements of the U.S. balance of payments.

Alternative Measurements of the U.S. Balance of Payments

The schematic balance of payments in Table 1.1 was intentionally oversimplified in order to focus attention on the differences in various concepts. It would thus be expected that the actual balance of payments for a given country would normally contain a greater amount of detail particularly in the capital account and in the balancing items. Some flavor of such detail can be had from Table 1.2, which indicates the three main groupings of accounts that are presently (1971) in use by the U.S.,[11] and from the illustrative transactions recorded and summarized in the appendix to this chapter. The actual balances corresponding to Table 1.2 are shown with minor modification for 1968–71 in Table 1.3. It is evident in reading down these tables that the two balances differ according to whether particular accounts are placed below or above the line.

The balance on goods and services indicated in Table 1.3 is equal to net exports in the U.S. national income and product accounts. It corresponds to items 1–5 in Table 1.1. The balance on current account in Table 1.3 is equal to net foreign investment in the U.S. national income and product accounts. It corresponds to items 1–7 in Table 1.1.

The rationale of the "balance on current account and long-term capital" is to distinguish those items above the line that are essentially more stable

11. See the source of Table 1.2 for an extended discussion of the merits and drawbacks of the different groupings.

TABLE 1.2

Three Kinds of Summary Groupings of U.S. International Transactions

I. Using concept of "balance on current account and long-term capital"
Goods and services
Remittances, pensions, and other transfers
U.S. Government grants, capital flows, nonscheduled repayments of U.S. Government assets, U.S. Government nonliquid liabilities to other than foreign official reserve agencies
Long-term private capital flows, U.S. and foreign
Direct investments abroad and in the U.S.
Foreign securities and U.S. securities other than Treasury issues
Other (bank and nonbank)
Balance on Current Account and Long-Term Capital
II. Using concept of "net liquidity"
Balance on current account and long-term capital
Nonliquid short-term private capital flows, U.S. and foreign
Claims reported by U.S. banks and nonbanks
Liabilities reported by U.S. nonbanks
Allocation of Special Drawing Rights (SDR's)
Errors and omissions, net
Net Liquidity Balance
III. Using concept of "official reserve transactions"
Net liquidity balance
Liquid private capital flows, net
Liquid claims reported by U.S. banks and nonbanks
Liquid liabilities to foreign commercial banks, international and regional organizations, and other foreigners
Official Reserve Transactions Balance
Financed by changes in:
Nonliquid liabilities to foreign official agencies reported by U.S. Government and U.S. banks
Liquid liabilities to foreign official agencies
U.S. official reserve assets, net
Gold, SDR's, convertible currencies, and gold tranche position in IMF

SOURCE: Adapted from U.S. Department of Commerce, Office of Business Economics, *Survey of Current Business*, 51 (June 1971), 30.

TABLE 1.3
The U.S. Balance of Payments, 1968–71
(Billions of Dollars)

(Credits +; debits −)	*1968*	*1969*	*1970*	*1971*
. Goods	+0.6	+0.7	+2.1	−2.9
. Services	+1.9	+1.3	+1.5	+3.6
Balance on goods and services[a]	+2.5	+2.0	+3.6	+0.7
. Personal and U.S. Government transfers	−2.9	−2.9	−3.2	−3.5
Balance on current account[b]	−0.4	−0.9	+0.4	−2.8
. U.S. Government capital flows, unscheduled repayments, and nonliquid liabilities	−2.2	−1.9	−2.0	−2.4
. Long-term private capital flows, U.S. and foreign	+1.2	−0.1	−1.5	−4.1
Balance on current account and long-term capital	−1.3	−2.9	−3.0	−9.3
. Nonliquid short-term private capital flows, U.S. and foreign	+0.2	−0.6	−0.5	−2.5
. Allocation of SDR's	—	—	+0.9	+0.7
. Errors and omissions	−0.5	−2.6	−1.1	−10.9
Net liquidity balance	−1.6	−6.1	−3.9	−22.0
. Liquid private claims (increase in assets −)	−0.6	+0.1	+0.3	−1.1
. Liquid private liabilities (increase in liabilities +)	+3.8	+8.7	−6.2	−6.7
Official reserve transactions balance	+1.6	+2.7	−9.8	−29.8
. Financed by changes in (increase in liabilities +; increase in assets −)				
a. Nonliquid liabilities to foreign official agencies	+2.3	−1.0	−0.3	−0.2
b. Liquid liabilities to foreign official agencies	−3.1	−0.5	+7.6	+27.6
c. U.S. official reserve assets	−0.9	−1.2	+2.5	+2.4

[a] Equal to net exports of goods and services in national income and product accounts.
[b] Equal to net foreign investment in national income and product accounts. Corresponds balance on current account and unilateral transfers (items 1–7) in Table 1.1.
SOURCE: Same as Table 1.2 and later issues.

ver time and that evolve regularly and predictably from underlying commercial and political considerations.[12] The items below the line are supposed, n contrast, to be more volatile and transitory. Separation of these latter ems has been further justified by Lary (1963, pp. 142–54), for example, on

12. This balance on current account and long-term capital is practically the same as the alance on "basic" transactions that was used in official U.S. balance-of-payments tables

the grounds that they are particularly sensitive to changes in monetary policy. However, as Johnson (1964, pp. 15–18) and Kindleberger (1969b, pp. 880–81) have noted, there are several difficulties with this arrangement. It is by no means clear that merchandise, services, unilateral transfers, and long-term capital transactions are necessarily stable and slowly growing as compared, say, to certain types of short-term capital movements designed to build up working balances. It may also be misleading to draw too fine a distinction between long-term and short-term capital. The reason is that relatively large flows of short-term capital may lurk in the direct- and portfolio-investment totals, while short-term credits may in effect be long-term in nature if they are repeatedly renewed. The special financial transactions on U.S. Government account may, furthermore, be sporadic rather than regular in occurrence. Finally, it cannot be said that the transactions above and below the line respond to different sets of forces. Thus, many of the basic transactions above the line will be highly sensitive to monetary policy especially when the object is to influence domestic activity and the foreign balance.

The "net liquidity balance" indicated in Table 1.3 is designed to measure the change in the U.S. liquidity position, which is composed of the net changes in liquid liabilities to private foreigners, nonliquid and liquid liabilities to foreign official agencies, and U.S. official reserve assets. The point of this measure is to focus attention on the ability of the U.S. authorities to act in defense of the exchange value of the dollar. The liabilities in question consist of the claims held in the U.S. by private and official foreigners in the form of demand deposits, time deposits, money-market paper, and U.S. Government short-term securities, bonds and notes. The official reserve assets consist of the nation's stock of monetary gold, Special Drawing Rights (SDR's),[13] convertible currencies, and the gold-tranche position in the International Monetary Fund.[14]

13. SDR's are international reserve assets whose creation was authorized by amendment to the Articles of Agreement of the International Monetary Fund (IMF). SDR's are to be allocated under this amendment to member countries in proportion to their IMF quotas. Allocations of $3,414, $2,949, and $2,952 million were made on January 1, 1970, 1971, and 1972, respectively. The U.S. shares of these allocations were $867, $717, and $710 million. The totals for subsequent years will be determined by Fund members in the light of world liquidity needs. More will be said about this below.

Since an SDR allocation adds to U.S. reserves (and to those of other participating countries) and there is no corresponding increase in liabilities, both the net liquidity balance and the official reserve transactions balance are favorably affected. U.S. holdings of SDR's can also change through purchases from or sales to other countries for balance-of-payments purposes. The aforementioned balances will not be affected, however, since the change in SDR holdings will be exactly offset by the change in liquid liabilities to foreign official agencies.

14. Drawings from the Fund can be made automatically for the country's gold-tranche position, which is normally equal to the member's quota minus the Fund holding of its currency. Further drawings are limited to amounts that will not cause the Fund holdings

The "net" liquidity balance is a definite improvement over the "gross" liquidity balance that had been reported in the official U.S. balance-of-payments accounts during the 1950's and 1960's.[15] The gross liquidity balance drew a somewhat artificial distinction between the transactions of private U.S. residents, which were recorded above the line, and those of private foreigners, which were recorded below the line. The rationale for this procedure was that the assets being accumulated abroad by private U.S. residents were not readily available to the U.S. authorities for use in protecting the dollar in the event of a sudden increase in the foreign official demand for gold caused by a large-scale liquidation of foreign-owned dollar claims. Whether or not the U.S. authorities were in fact powerless to effect such a repatriation of U.S. owned short-term assets abroad is an empirical question, however. But more important, the gross liquidity concept failed to take into account the far greater threat that would be created if foreign-official dollar claims were enlarged significantly as a result of an increase in the demand for foreign assets by private U.S. residents who decided for some reason to liquidate assets of all kinds held in the U.S. An additional drawback of the gross liquidity balance was in the handling of special financial transactions that shifted funds of foreign official agencies from liquid to presumably nonliquid categories. This type of window dressing improved the gross liquidity balance, but worsened it when the transaction was subsequently reversed.

However, the net liquidity balance is not without its problems. It will be noted, first, that net errors and omissions are recorded above the line. To the extent that this represents unrecorded outflows of U.S. short-term funds to the Eurodollar market especially,[16] U.S. claims on foreigners will be understated and the net liquidity deficit therefore overstated. A second difficulty is in distinguishing liquid from nonliquid claims and liabilities. This is in part a problem of information since adequate data are not available on all the various forms in which the claims are held and particularly on the motivations—whether short- or long-term—of the holders of the claims. A sizable part of the U.S. bank liabilities to foreigners may also be nonliquid insofar as they include custody liabilities for customers and compensating balances held against loans to foreigners.

The balance on "official reserve transactions" recorded in Table 1.3 is essentially the same as the balance on "official settlements" recommended in the (Bernstein) report of the Review Committee for Balance of Payments

15. See Lederer (1963) for an extended discussion and defense of the gross liquidity balance.

16. The Eurodollar market, which is centered primarily in London, is one in which commercial banks accept interest-bearing deposits denominated in foreign currencies, mainly dollars, and then relend these funds in the same or some other currency. For a

Statistics (1965).[17] In contrast to the net liquidity balance, the balance on official reserve transactions records below the line only the changes in U.S. liabilities to foreign official reserve agencies and changes in U.S. official reserve assets. That this change in arrangements can yield strikingly different results is evident in Table 1.3. Thus, in 1969, the net liquidity balance showed a $6.1 billion *deficit* and the balance on official reserve transactions a $2.7 billion *surplus*. In 1970, the net liquidity *deficit* was $3.9 billion and the official reserve transactions *deficit* was $9.8 billion. The deficits for 1971 were $22.0 and $29.8 billion, respectively.[18]

The purpose of the balance on official reserve transactions, in the Review Committee's words (1965, pp. 109–10), is "to measure the gap between the normal supply of and demand for foreign exchange—a gap which the monetary authorities here and abroad, must fill by adding to, or drawing down, their reserve assets if exchange rates are to be held stable.... The size of these transactions in international reserves provides the best available measure of the market intervention that has been necessary, of the gaps that have had to be filled, and hence of payment disequilibrium."

Cooper (1966, pp. 387–89) has pointed out two important difficulties with the concept of the balance on official reserve transactions. The first has to do with whether the "normal supply of and demand for foreign exchange" can be determined precisely. In recommending that U.S. liquid liabilities to private foreigners be recorded above the line, the assumption is that these balances are held exclusively to finance ordinary commercial transactions. This may not be the case, however, insofar as changes in these balances may frequently be the result of responses by commercial banks to changes in policies designed by the U.S. and foreign monetary authorities to influence conditions domestically and in the foreign exchange market. Thus, for example, foreign central banks, by means of domestic interest-rate and forward-market exchange policies, can induce their commercial banks to hold dollars the central banks themselves would otherwise have had to hold. The balance on official reserve transactions can therefore be subjected to changes that are transitory rather than normal. The net liquidity balance would in contrast not be affected by these shufflings of U.S. claims.

The second difficulty noted by Cooper is that the balance on official reserve transactions may not be a reliable and exact measure of the foreign exchange "gaps that have had to be filled." The reason is that the disequilibrium notion of gaps to be filled is ex ante in character and cannot therefore be observed. We have noted in our earlier discussion of autonomous

17. The main difference is that prepayments to the U.S. on government debt and advance payments for future military sales are recorded above the line rather than below as recommended in the Report. For a brief discussion of the issues involved in handling prepayments, see Cooper (1966, p. 388).

and accommodating transactions that there is a continuous interaction between changes in policies and international transactions of all kinds. It is therefore not possible in the ex post sense to distinguish precisely settlement items from other items in the balance of payments. In other words, as Cooper put it (1966, p. 389): "The 'gap to be filled' is thus a variable one, depending on economic policies at home and abroad."[19]

It is evident that the concepts of the net liquidity and official reserve transactions balances have important drawbacks. These drawbacks stem mainly from the fact that we are dealing with variations merely in an accounting framework of ex post phenomena, whereas we would like ideally an analytical framework that would correspond to ex ante theoretical considerations. What it comes down to is that one should not use any particular concept blindly. Rather, an attempt should be made, with full realization of the conceptual problems involved, to specify alternative foreign exchange gaps as targets for purposes of economic policy.

Thus, if it is believed that the balance on official reserve transactions is a reasonable reflection of autonomous and policy factors, we might strive to attain a policy goal of a zero balance on official reserve transactions,[20] subject to the attainment of certain other specified norms such as full employment without inflation and without increased restrictions on trade and payments.[21] In principle, at least, the authorities would seek to evaluate periodically the realization of their external and internal objectives and then in this light to implement changes in policies designed to accomplish their objectives in a subsequent period. This is not to say that the implementation of proper policies is easy to achieve in actuality. Moreover, there may be certain additional complexities that affect policy making in the case of the U.S. in particular.

These additional complexities arise from the special role played by the dollar internationally in connection with the financing of world trade and in the use of the dollar as a reserve currency. Thus, if we assume that foreign

19. One further difficulty may be mentioned that has developed in connection with the "recycling" of official dollar holdings through the Eurodollar market and back to the U.S. What this involves is one central bank transferring funds to the Eurodollar market. These funds are lent to a private foreigner who converts them into domestic currency via a second central bank, and the second central bank places them back in a U.S. bank. The official reserve transactions balance will not be affected by this chain of events. But the dollar holdings of the central banks combined will be greater, which could lead to increased foreign-exchange-market pressures. See illustrative transaction (14) in the appendix to this chapter for the case in point.

20. A similar goal of zero balance would not be appropriate using the net liquidity concept in view of the important role that dollar holdings play in private international financial transactions. That is, if private foreign dollar holdings were not permitted to expand by means of a net liquidity deficit, there would be a drain upon officially held [illegible] with the possible consequence of a serious deflationary impact.

dollar holdings will continue to expand to serve both trade financing and reserve purposes, the desirability of a zero balance on official reserve transactions may be subject to question. It does not follow of course that the liquidity balance should furnish the appropriate policy criterion. Rather what might be sought is a concept that would measure the provision to the rest of the world of dollar balances and monetary reserve assets by the U.S. in its capacity as a world banker and supplier of international reserve currency. We might call this concept the "net contribution to world liquidity."[22]

Shifting attention from the official reserve transactions and net liquidity balances to a different concept of this kind would clearly require important changes in the way we think about the U.S. balance of payments. Up to this point it has been assumed that all capital flows have a counterpart in the movement of real goods and services. This ignores the substantial amount of international trade in financial claims. Trade in claims may have no real counterpart. It may be highly responsive nevertheless to international economic differences in cost and demand and in credit availability, which are associated with national capital markets of varying efficiency and breadth and with variations in taste with respect to liquidity and asset-portfolio balance.

The point is that the U.S. is at one and the same time a major source of international capital for the financing of trade and a financial intermediary that provides facilities whereby money and financial claims of varying maturity can be exchanged. Thus, when the U.S. is referred to as "lending long" and "borrowing short," there are both capital-market efficiency and asset-portfolio factors involved. Once this is granted, conventional measures of balance-of-payments equilibrium can no longer be applied with clear meaning. This is especially the case since the criterion of equilibrium now cannot be specified as a zero balance, but rather must reflect some net contribution to world liquidity. The amount of this net contribution will be determined by the interplay of the forces underlying the expansion, stability, and pattern of international trade and financial transactions.[23]

The major question that all of this raises is the extent to which the dollar will continue to be used as an international reserve currency. If SDR's or some other new international reserve unit were completely to replace the dollar and agreement were reached on planned expansion of world liquidity, the proper goal of policy would be a balance-of-payments surplus as measured by the desired accretion of the country's reserves that was consistent with the attainment of its internal policy goals. But suppose, as seems likely, that SDR's and the dollar are to exist side by side for official reserve purposes. In such an event, if pressures were strongly exerted on the U.S. to reduce

22. The discussion in this and the succeeding two paragraphs draws upon ideas that [illegible]

sharply or to eliminate altogether its balance-of-payments deficit without compensating allowance for the growth of other international reserves, the resulting squeeze on world liquidity could have important deflationary implications for the world as a whole.

Conclusion

We have focused on various concepts of balance-of-payments equilibrium. It was suggested that an ex ante concept of balance-of-payments equilibrium may not be easily determined because of the continuous interplay between the implementation of economic policies and the carrying out of international transactions of all kinds. It may therefore be difficult to distinguish satisfactorily between autonomous and accommodating transactions and to assume some given magnitude of balance-of-payments disequilibrium for purposes of maintaining exchange-rate stability. While recognizing the importance of these reservations, we shall proceed nevertheless in much of what follows on the assumption that the conventional distinction between autonomous and accommodating items can be maintained. This assumption will serve conveniently for many purposes and will be relaxed wherever relevant.

We also had occasion to discuss briefly in the context of the U.S. balance of payments the issues involved in attempting to measure the balance on current account and long-term capital, the net liquidity balance, and the official reserve transactions balance. The question was also raised as to whether, in the light of the special role of dollar balances in financing world trade and serving as an official reserve currency, it might not be preferable to use an altogether different concept that would focus on the net contribution of the U.S. to world liquidity.

Appendix: Balance-of-Payments Accounting

In order to clarify the nature of balance-of-payments accounting and the measurement of various balances, it may be useful to consider the illustrative transactions for the U.S. that are listed below.[1] The debits and credits corresponding to each transaction have been entered with their identifying number in parentheses in the appropriate balance-of-payments accounts listed in Table 1.A.1. The recording of debits and credits in the current account and unilateral transfers should not create any particular difficulty. It should be noted that in the capital account and balancing items increases in assets are indicated by (−) and reductions by (+) while increases in liabilities are indicated by (+) and reductions by (−). Since the balance-

TABLE 1.A.1
Illustrative Balance-of-Payments Transactions for the U.S.

	Debits (−)	*Credits* (+)
A. Goods and services		
1. Merchandise	$425,000 (2)	$500,000 (1) 100,000 (8) 150,000 (10)
2. Shipping	43,000 (3)	
3. Tourist expenditures	30,000 (5)	
4. Banking and insurance	2,000 (4)	
5. Dividends and interest		75,000 (6)
Total, 1–5	500,000	825,000
B. Unilateral transfers		
6. Private remittances	10,000 (7)	
7. Government transfers	100,000 (8)	
Total, 1–7	610,000	825,000
C. Capital account [increase in assets (−)]		
8a. Long-term foreign investment	200,000 (9) 150,000 (10)	
Total, 1–8a	960,000	825,000
8b. Allocation of SDR's		100,000 (15)
8c. Short-term capital movements:		
U.S.	500,000 (1)	10,000 (7)
private	75,000 (6)	
	100,000 (13)	
8d. Short-term capital movements:		425,000 (2)
foreign	50,000 (11)	43,000 (3)
private		2,000 (4)
		30,000 (5)
		100,000 (13)
		50,000 (14)
D. Balancing items [increase in assets (−)]		
		200,000 (9)
9. Short-term capital movements:		
foreign	75,000 (12)	50,000 (11)
official	50,000 (14)	90,000 (16)
10. Gold and SDR movements	100,000 (15)	75,000 (12)
	90,000 (16)	
Total, 1–10	$2,000,000	$2,000,000

of-payments accounts are kept on a double-entry basis, the total debits and credits in the table must be equal.

The various balances discussed in Chapter 1 have been computed in Table

TABLE 1.A.2
Various Illustrative Balances in the U.S. Balance of Payments

	Thousands of Dollars	
1. Merchandise	+325	
2–5. Services		
A. *Balance on goods and services*		+325
6–7. Unilateral transfers	−110	
B. *Balance on current account*		+215
8a. Long-term capital: private	−350	
C. *Balance on current account and long-term capital*		−135
8b. Allocation of SDR's	+100	
D. *Net liquidity balance*		−35
8c. Short-term capital: U.S. private	−665	
8d. Short-term capital: foreign private	+600	
E. *Official reserve transactions balance*		−100
9. Short-term capital: foreign official	+215	
10. Change in gold stock and SDR's		−115

will worsen. This balance will be unchanged, however, if the official holdings are recycled back to the U.S. The allocation of SDR's to the U.S. by the IMF will improve both balances, whereas sales and purchases of SDR's by foreign official institutions will be offsetting balancing items.

ILLUSTRATIVE TRANSACTIONS

(1) A German manufacturer purchases $500,000 of electrical machinery from an American manufacturer; payment is made by creating a mark deposit in Frankfurt in favor of an American bank.

(2) American firms import $425,000 of bananas from Ecuador, paying with dollar checks on New York banks.

(3) A freight charge of $43,000 is incurred by the American firms on the preceding import of bananas; payment is made to a Panamanian shipping line with dollar checks on New York banks.

(4) An insurance charge of $2,000 is incurred by the American firms on the preceding import of bananas; payment is made to a British insurance company with dollar checks on New York banks.

(5) American tourists traveling in Italy spend $30,000. They obtain the necessary Italian lire by cashing traveler's checks at Italian banks. These banks, in turn, added these checks to their dollar balances in New York.

(6) American corporations receive $75,000 in dividends and interest from their overseas investment in France. Payment is made by increasing franc deposits of these corporations in Paris.

(7) Americans contribute $10,000 for the restoration of Italian art; payment is made by drawing down lire deposits held in Rome by an A...

(8) The U.S. Government donates $100,000 of wheat to India.

(9) The Government of Belgium sells a $200,000 issue of 25-year bonds in the New York capital market and adds the dollar proceeds to its official foreign exchange reserves held in New York banks.

(10) American corporations export $150,000 of machinery to expand their branch operations in Japan.

(11) German banks transfer $50,000 of deposits held in New York to the German Central Bank in exchange for mark balances in Frankfurt.

(12) The Bank of France purchases $75,000 of gold from the U.S. Treasury, paying with a check on its dollar deposits held in New York.

(13) American corporations transfer $100,000 of deposits held in New York to banks in the Eurodollar market in London.[2]

(14) The Bank of Italy transfers $50,000 of its official reserve holdings in New York banks to banks in the Eurodollar market in London.[3]

(15) The U.S. receives an allocation of $100,000 in SDR's from the IMF.

(16) The Japanese Central Bank increases its official dollar holdings in New York by $90,000 in exchange for a like amount of SDR's.

2. If these banks then arrange interbank transfers with other Eurobanks and/or lending takes place to private foreigners, the U.S. balance of payments will not be affected so long as these balances remain within the Eurodollar market and are not "repatriated" to the U.S. There will similarly be no effect on the U.S. balance of payments if U.S. banks borrow existing Eurodollars from their foreign branches or other Eurobanks, except perhaps for a transfer of U.S. liquid liabilities from one foreigner to another. This assumes again no repatriation of Eurodollar balances to the U.S. See Little (1969, pp. 18–21) for further details.

3. Suppose that the Eurobanks then loan these funds to a private foreigner, who in turn converts them into domestic currency via his central bank, and the latter deposits them in a New York bank. There will be no net effect on the official reserve transactions balance since the transactions of the two central banks cancel each other. However, the dollar holdings of the first central bank are unchanged and those of the second central bank increased so that this recycling could conceivably increase the foreign exchange-market pressures on the dollar.